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A REPORT OF THE SOUTHERN REGIONAL CONFERENCE ON EARLY CHILDHOOD EDUCATION.

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ONE HUNDRED EDUCATORS FROM 13 SOUTHERN STATES MET FOR A 3-DAY CONFERENCE IN WHICH POSSIBLE DIRECTIONS FOR EARLY CHILDHOOD EDUCATION WERE EXPLORED WITH SPECIFIC EMPHASIS ON STATE-FUNDED PRESCHOOL EDUCATION FOR THE DISADVANTAGED CHILD. REPORTS WERE GIVEN ON THE FOLLOWING ONGOING PROJECTS--(1) DEMONSTRATION AND RESEARCH CENTER FOR EARLY EDUCATION (DARCEE), GEORGE PEABODY COLLEGE FOR TEACHERS, (2) THE LEARNING TO LEARN SCHOOL, JACKSONVILLE, FLORIDA, (3) RESEARCH AND DEVELOPMENT CENTER IN EDUCATIONAL STIMULATION, UNIVERSITY OF GEORGIA, (4) DURHAM EDUCATION IMPROVEMENT PROGRAM, DUKE UNIVERSITY AND NORTH CAROLINA COLLEGE, (5) FRANK PORTER GRAHAM INSTITUTE ON EARLY CHILDHOOD EDUCATION, UNIVERSITY OF NORTH CAROLINA, (6) PARENT EDUCATION PROJECT, INSTITUTE FOR DEVELOPMENT OF HUMAN RESOURCES, UNIVERSITY OF FLORIDA, (7) SUMTER CHILD STUDY PROJECT, SOUTH CAROLINA, (8) NATIONAL TEACHER CORPS, UNIVERSITY OF GEORGIA, (9) HEAD START. INCLUDED ARE A LIST OF CONFERENCE PARTICIPANTS AND A BIBLIOGRAPHY ON EARLY CHILDHOOD STUDIES. THIS DOCUMENT IS ALSO AVAILABLE FROM THE SOUTHERN EDUCATION FOUNDATION, 811 CYPRESS STREET, N.E., ATLANTA, GEORGIA 30308. (MS)

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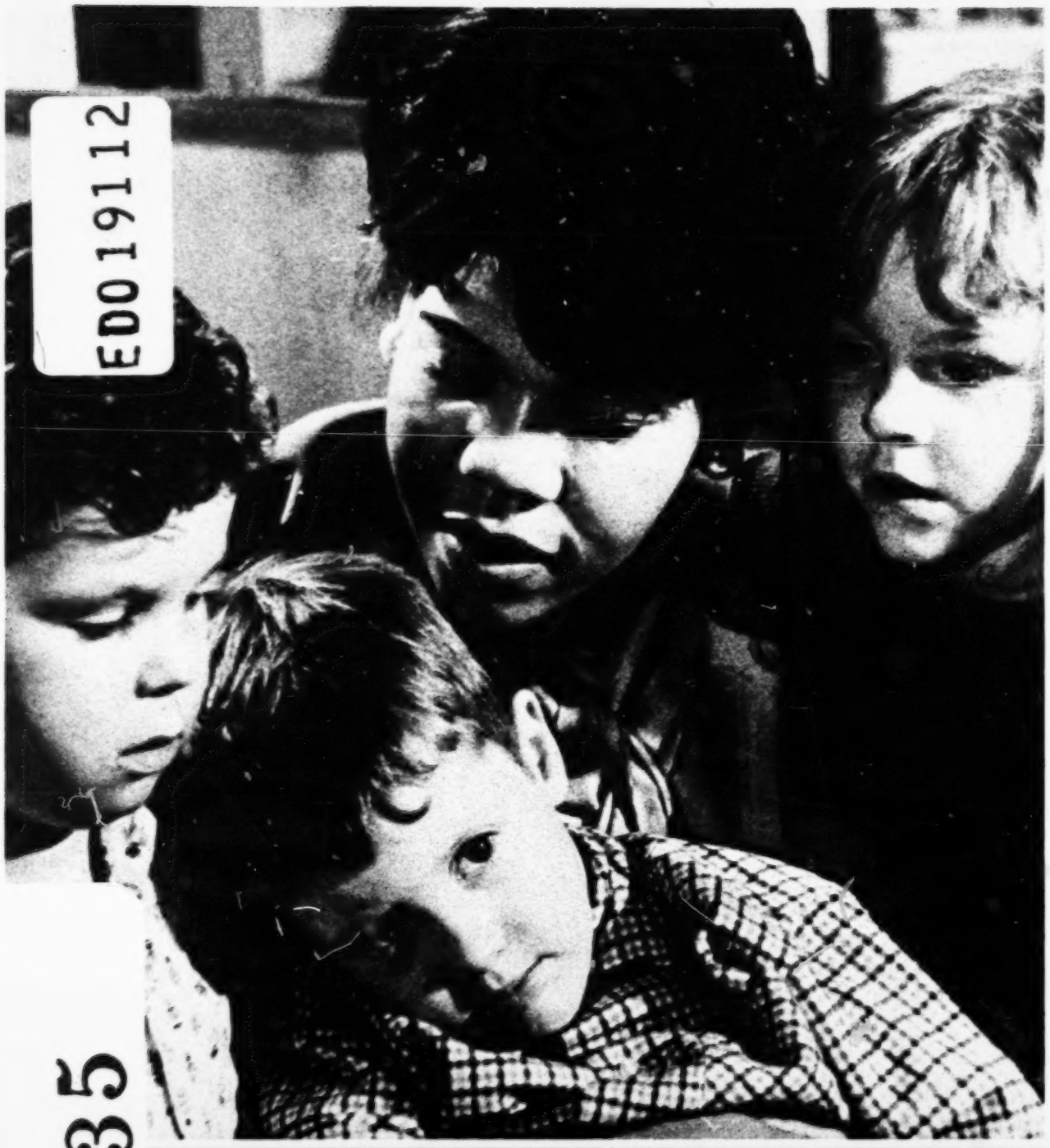

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A Report of the Southern Regional Conference on

early childhood education

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Foreword

THE FOLLOWING PAGES report a three-day dialogue on early childhood education. The occasion was the Southern Regional Conference on Early Childhood Education conducted under the sponsorship of the College of Education and Institute of Higher Education of the University of Georgia, and supported by the Southern Education Foundation (SEF). The report was prepared by Miss Barbara Carter, of Free Lance Associates, New York. It does not pretend to provide a complete record of the meeting nor even to reflect all the ideas nor all the speeches. But it is a journalistic account of what one professional writer encountered at the conference and what she heard. I think the piece reflects that Miss Carter is a good reporter, skillful in handling educational materials. Because SEF hopes that the Athens conference indeed will be the beginning of an important dialogue in the South about early childhood education, the Foundation is pleased to make this report available.

The Foundation wishes to express its appreciation to all those who participated in the Athens conference and particularly to those who had a part in planning and carrying out the program, to Dr. Galen Drewry, of the Institute of Higher Education, to Dean Joseph A. Williams, of the College of Education, to Dr. Milly Cowles and Mr. Ted Hammock, who served as co-chairmen of the conference, to Dr. Gordon Klopf and the distinguished team of consultants from the Bank Street College of Education.

Most Southern states have spent no state funds for programs below the first grade, but there is a growing sentiment in support of changing this pattern. SEF is concerned that as public funds are made available, they will

go to support racially integrated and educationally sound early childhood programs. To encourage thoughtful planning, SEF also has funded state conferences in seven states in addition to the regional conference. With the assistance of the Rockefeller Foundation, SEF also supported 78 fellowships for Negroes and 64 fellowships for whites in the summer, 1967. These were distributed over 12 Southern institutions. The purpose was to encourage the development of academic programs at various colleges and universities and to increase the number of teachers who have had special training in early childhood education. Also in cooperation with Rockefeller Foundation, SEF supported a two-week leadership seminar at the Bank Street College of Education in June, 1967. Each state department of education in the South was invited to send a bi-racial team of two. The chief state school officers or their deputies were invited to a special day and a half program during the seminar.

This report of the Athens regional meeting reveals that already in the South there are exciting new programs for children under six, some funded with private and some with federal funds. The prospect of the enlargement of these by the commitment of state funds offers much promise for the extension and improvement of educational opportunity for Southern children, Negro and white. Because early childhood programs make a particularly significant difference for disadvantaged children, we believe state support of early childhood programs may enhance the total educational effectiveness of Southern schools, and thus make a contribution not only to education of individual children but also to the total utilization of human resources of the region.

John A. Griffin
Executive Director

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The Dialogue Begins:

Early Childhood Education and Its Implications for the South

TODAY, the South is on the verge of important new developments in the field of early childhood education—developments that could have profound repercussions for the region, not only educationally, but economically and socially as well. The South is not alone in this, of course. The entire nation is caught up in the movement of changing the character of elementary education and expanding education in the early years below the first grade. Within the past two years, for instance, seventy U.S. cities embarked on pre-school programs. Nearly 600,000 children were in Head Start programs in the summer of 1966 and 136,000 in Head Start's year-round programs in the year 1966-67.

The movement, however, goes far beyond merely adding kindergarten or nursery school to the public system, and even beyond the present concern for the "disadvantaged" child. It involves complex issues of cognitive learning and early social adaptation, of teacher training and certification, of parental involvement, of paraprofessional help and teachers' aides. It involves community support and legislative assistance. It involves new alliances between educators, health and welfare officials, social workers, and parents. It could lead to the beginning of a vast restructuring of the educational system as a whole, and, in the South, to the development of the industrial and scientific manpower the South so urgently needs to improve its competitive position in the nation. Most of all, what it could mean to the child who might otherwise be unable to benefit from education is simply incalculable.

The Athens Conference

THIS MARCH, a dialogue on the implications of planning for early childhood education in the South was initiated when nearly one hundred educators from 13 Southern states (Virginia, Kentucky, Arkansas, Tennessee, North and South Carolina, Texas, Oklahoma, Louisiana, Florida, Georgia, Mississippi, and Alabama) gathered for a three-day regional conference in Athens, Georgia. The conference was sponsored by the University of Georgia's College of Education and Institute of Higher Education, and funded by the Southern Education Foundation. The participants included representatives of Southern universities and colleges, state departments of education, state and local school boards, as well as those connected with ongoing university research in early childhood development or pre-school programs now in progress in the South.

Three representatives of the Federal government—Mr. Jule M. Sugarman of the Office of Economic Opportunity, Dr. Frank Pederson of the National Institute for Child Health and Human Development, and Dr. Minnie Berson of the U.S. Office of Education—addressed the conference on "Federal Assistance in Research and Education for Young Children." The "Needs of the Southern Region" were amplified by Dr. Vivian Henderson, President of Clark College, Georgia, and Dr. John Codwell, associate director of the Educational Improvement Project of the Southern Association of Colleges and Schools. "Programs in Early Childhood Education" were discussed by Dr. John H. Niemeyer, President of New York City's Bank Street College of Education, long a forerunner in the field.

In addition, seminars were held where leaders in early childhood education or research programs could discuss their projects. Represented were:

- the Frank Porter Graham Institute on Early Childhood Education, University of North Carolina
- the Pre-Primary Project, Research and Development Center, University of Georgia
- the Demonstration and Research Center for Early Education, George Peabody College for Teachers, Nashville, Tennessee
- the Parent Education Project, University of Florida
- Head Start centers in Baton Rouge, Louisiana; Jackson, Mississippi; Albany and Gainesville, Georgia
- the Durham Education Improvement Program in North Carolina
- the Learning to Learn project in Jacksonville, Florida
- the Sumter Child Study Project in South Carolina
- the National Teacher Corps training program at the University of Georgia.

When those planning the conference first met in January, it was hoped that the conference would produce guidelines showing the direction early childhood education might take in the South. "In the next three or four meetings, however," according to the chairman of the planning committee, "it became increasingly clear that it was too early to make judgments, too early to issue a white paper on early childhood education." Thus the aim of the conference shifted. Instead of resulting in guidelines, this report on the conference will deal with some of the current major approaches to early childhood education by describing selected exciting projects presently going on in the South, and, with an eye on Southern needs, discuss the implications for the South that were raised at the end of the conference. It is intended to serve as a basis for exploring the directions the diverse regions of the South might take in expanding early childhood education.

Why Early Childhood Education Is Important

COGNITIVE learning and language development in the first five years of a child's life have a crucial impact on his later personality and intellect. Studies have shown that fifty per cent of his mature intelligence develops between conception and age four, another thirty per cent from ages four to eight, and the remaining twenty per cent from ages eight to seventeen. Moreover, characteristics that develop early tend to stabilize, making change more and more difficult as time goes on. Experiments with pre-school programs, however, have shown surprising gains in the initial development of intellectual functions, and have led to the conviction that young children can learn much more than they are commonly being taught, and particularly that children of economically deprived families can be compensated for the learning deficiencies in their homc environment in time to benefit from schooling.

. . . For the "Disadvantaged"

Many of the pre-school programs now burgeoning in the South are aimed at the "disadvantaged." Although the term "disadvantaged" tends to promote the image of a stereotype, a dangerous concept when dealing with the variety that children represent, it is useful at least to describe the kinds of deficits with which, in varying degrees, children from homes of severe poverty may enter school.

One deficit is a lack of language skills. This can go beyond the lack of words for things to the lack of the thought processes that lie behind language and are expressed in language. Sometimes such children cannot discriminate one object from another, sometimes their curiosity has atrophied. When they come from families where there has been little conversation, little reading aloud, and few playthings, their lack of experience leads to difficulties in learning to talk, and hence in learning to read and write, and hence in learning to think. If school teaches them anything, it is what failure means.

Another deficit they may bring to school with them is a lack of emotional development. Behind the meagerness of language at home may lie a meagerness of people being in close touch with each other. If children have been largely ignored, beyond the basic necessities, if they have not been played with much, not been recognized as personalities in their own right, not been involved in rich and warm relationships with their families, they will find it difficult to relate to people, and thus again, difficult to learn.

A third deficit some may bring with them stems from the underlying panic that permeates many homes caught in the grip of poverty. The basic necessities are uncertain, parents unpredictable, the world suspect and threatening. This, too, is a barrier to learning.

If a composite picture were to be drawn of the "disadvantaged" child (always excepting individual differences), it would probably include, at the very least:

- language inadequacies, such as limited vocabulary, inability to handle abstract symbols, difficulty in maintaining thought sequences verbally, difficulty in interpreting and communicating
- visual and perceptual deficiencies
- restricted attention span
- low motivation
- low self-image

With such strikes against him, the child tends to fall further and further behind as school becomes more and more difficult, until he finally joins the ranks of the dropouts, alienated from society and ill-prepared for life

in an increasingly technological society. About the only prospect vouchsafed him is to see his failure to cope repeated in his children.

Studies have shown that educational intervention in the early years can make a difference. The Early Training Project at George Peabody College for Teachers, to take just one of many examples involving three-to-four-year-olds from economically deprived families, "found statistically significant differences" between those who went to pre-school in the summer and those who didn't. "The greatest differences were just prior to school entrance, when the two treatment groups showed average IQ gains on the Binet of nine and five points, while the . . . control groups lost four and seven points respectively. On measures such as the Peabody Picture Vocabulary Test and the Illinois Test of Psycho-Linguistic Abilities, similar results were obtained."

. . . For All Children

In addressing the Athens conference, Dr. John Niemeyer, President of Bank Street College of Education, spoke of the "miracles" that have been happening in pre-school programs with "children considered unteachable." In one Bank Street experiment with "unteachable youngsters," a year and a half improvement was achieved in one month. "We discovered they had an amazing interest in poetry, were skillful with words, and loved to play with words. It may be that there is a latent power here in the so-called non-verbal population we hadn't dreamed existed."

What has this to do with the education of children in general? "The point is we are learning a great deal about learning from this attack on poverty," Dr. Niemeyer said. He spoke of the fact that America has embarked on its second great adventure in education, not simply making schools available for all but now actually attempting to educate all, "a responsibility we really yet don't know how to carry." Although schools do a reasonably good job for the child who will get ahead despite the weaknesses of the program, a large segment of the school population, about thirty per cent, has never benefited much from school. In addition, Dr. Niemeyer pointed out, jobs are no longer as available for the under-educated, and their cycle of poverty is becoming more permanent, handed on from generation to generation. Thus the health of society itself is becoming increasingly threatened by the existence of this group.

But "if we start off being concerned about the extremely disadvantaged child," Dr. Niemeyer said, "and learn to educate him to his fullest capacity, we will change the quality of education not just for the disadvantaged, but for all children. Even for bright minds, we have never achieved a level quite up to the hopes of what education could mean. To make education better, we must focus on the child we don't know how to educate yet."

Early Childhood Education In the South

CURRENTLY, a considerable amount of activity in the field of early childhood education is taking place in the South. Head Start programs are found in every state, and research in curriculum, behavior modifications, parental and community involvement, and the training of preschool teachers and paraprofessionals is well under way. The following reviews these major aspects of the projects in the South that were presented at the Athens conference.

Curriculum and Curriculum Materials

"There is really a very limited supply of quality learning materials appropriate to deprived children," said Dr. Richard H. Hinze, Director of Training at the DEMONSTRATION AND RESEARCH CENTER FOR EARLY EDUCATION, George Peabody College for Teachers, Nashville, Tennessee. "We are continuously designing and experimenting with new materials that will help the child to learn similarities and differences, to order and to recognize sequences—keeping in mind that at the same time he should be encouraged to explore his natural environment. A good example is the flannel board kit we use called *Willie the Weatherman.* After a discussion of today's weather, the children choose suitable articles of clothing for Willie; they provide props, such as trees and flowers, sun or clouds, that fit the season and the day. Recognizing and classifying objects contribute to cognitive development, and the entire exercise is related to the natural environment.

"As for books, we of course use the classics for small children, such as *Goldilocks and the Three Bears, The Gingerbread Man, Peter Rabbit.* Yet when we try to find books with human figures, we have difficulty. Only a handful of such books are appropriate for the deprived child, par-

ticularly the Negro child. . . . It is extremely important in developing an interest in books to have human figures with which pre-school disadvantaged children can identify. So we are in the process of developing written materials that can be tested for response in the classroom."

The Center has three demonstration units, one on the campus, another adjacent to a Negro housing project, and a third in a rural area. An extensive monograph entitled *Before First Grade* outlines the early training project, and gives detailed information on classroom activities, curriculum materials, and methods of working with mothers.

THE LEARNING TO LEARN SCHOOL, 1936 San Marco Boulevard, Jacksonville, Florida, is also innovating materials, "specifically designed to be used with a newly developed sequential curriculum." The curriculum is designed for children with an IQ beginning in the high seventies and up, and was used last year with two dozen culturally-disadvantaged kindergarten children, and this year, after some changes in vocabulary, with two dozen middle-class and lower middle-class children.

"The curriculum and innovations depart from programs now being offered in early childhood education," Dr. Herbert A. Sprigle, the program director, said. Since the primary goal is "to help the child learn to learn," pre-school education is viewed as part of a continuum of preparation from early childhood to adulthood, rather than the more limited goal of preparation for first grade. The program is "theoretically based, systemically arranged and sequentially ordered curriculum, rather than a collection of activities." Emphasizing "intellectual stimulation," it focuses on "the child's strategy for problem solving" and the "way he goes about imposing organization on facts and information," but without neglecting the child's emotional-social development, "a process," Dr. Sprigle said, "that is just reversed in the majority of programs." It also gives special attention to individual differences.

"You may be quick to note," Dr. Sprigle continued, "that the focus is not on those deficiencies attributed to the disadvantaged children. We did not make a direct, frontal attack on language and perceptual development, on readiness skills needed for first grade, or exposure to a variety of rich experiences. Rather, we have taken the position that disadvantaged children need to develop a foundation on which to build later learning. This foundation includes the mastery of basic concepts and attitudes toward learning." He listed, for example, the concept that ideas and things in nature are connected and interrelated, the concept that everything in the physical world has some function, the concept that there is a way of getting from the known to the unknown. The program

is designed to move the child "from a stage of dependence on actual manipulation of objects to the point where he can internalize these experiences, put them into words and ideas, and communicate without the presence of the real objects."

The classroom is divided into two areas. One is a work-play area for all children, the other is a smaller room where four children, at the same developmental level, can be worked with at a time, thus making both heterogeneous and homogeneous grouping possible. The small groups are reformed weekly, permitting each child to progress at his own rate.

The curriculum is designed to make the child an active participator in the learning process, to provide him immediate opportunities to use his newly-found information or talent, and to later check how much he has actually learned. The non-math material, for example, deals with experiences familiar to all children, such as, in order of their introduction, the human body, clothing, food, the house and its contents, animals, and transportation. With food, for example, children might progress from feeling and smelling a pear, a banana, an orange, to describing them, in a game, for others, to including them in the category of fruit, to cutting their pictures out of a magazine, to recognizing them, in other games, where they are only half pictured. Interspersed strategically are field visits to farms, supermarkets, and warehouses.

"In three or four months," Dr. Sprigle said, "we have covered about six or seven classifications. We wait a while and go on to other things, only to return to determine the strength of the organization the children have imposed on this material. . . . These games have important practical implications. They help the child develop conceptual strategies that permit him to deal simultaneously with an array of objects in terms of their common features rather than with each object or model as a percept or image by itself. It involves not just a double classification, but in some cases a multiple classification. Once this achievement is reached, the child is able to talk and 'think with language' about ways of combining and recombining, dividing and sub-dividing the array."

THE RESEARCH AND DEVELOPMENT CENTER IN EDUCATIONAL STIMULATION of the University of Georgia, in cooperation with the Clayton County school board, is testing the hypothesis that if a child begins a process of "continuous, structured, educational stimulation" when he is three years old he will be further ahead when he is twelve years old than if he had not. The project was initiated in 1966 with 180 "average" children. It will be completed in 1974, when the three-year-olds are twelve or thirteen.

In place of "grade levels" the program emphasizes "continuous prog-

ress," with each child encouraged to move at his own rate. "Neither chronological age nor number of years in school are the criteria for determining when particular subject matter is to be presented." Instead it is "presented when the child can comfortably and effectively acquire it."

But "educational stimulation does not endorse waiting; it requires a structured plan by which the child is carefully, cautiously, and comfortably led through a series of well-designed, structured, and sequential activities which cause him to have those characteristics necessary to perform at the desired level as early as he can comfortably do so. Each and every task which he completes should purposely lead him to the next higher level of performance."

Dr. Charles E. Johnson, associate director of the Center, is responsible for the development of methods, materials, and curricula for the pre-primary unit. Everything is included in the curriculum—reading, arithmetic, literature, music, art, rhythm, science, social studies, health, and physical education. "Naturally, beginning lessons are simple. A lesson in reading for a child not yet three years old might simply be an activity in which he becomes acquainted with books by having a story read to him, calling a book a book, and helping to turn the pages. Such simple activities eventually lead to the child's identifying words as representative of things and thoughts—hopefully at an earlier age than might otherwise have been the case."

Many ready-made materials are being tested—Gotkin's *Language Lotto,* the Peabody Language Development Kit materials, *Science—a Process Approach,* prepared by the American Association for the Advancement of Science, and the reading readiness materials of the American Book Company. "We desire a well-rounded sequential program," Dr. Johnson said. "The educational stimulation is systematic—and also eclectic. We revise as we go along."

A rough draft of the objectives in pre-primary social studies provides a good example of the program's aims in one field:

PERSONAL KNOWLEDGE

Tells his full name, his address, telephone number, birthday and parents' names.

Explains the roles of father, mother, brother, sister in the family.

Correctly explains the relationship of such words as husband, wife, grandmother, grandfather, uncle, aunt, cousin, nephew, niece, grandson, and can read them.

KNOWLEDGE OF HOUSES

Explains types of houses (one-story, two-story, split-level, apartment, duplex).

Explains that houses are made from many different materials (wood, brick, concrete, stucco).

Describes the use of each room in the house (kitchen, living room, den, bedroom, bathroom, porch, patio).

Describes the use of various items commonly found in houses (chair, couch, table, bed, chest, stove, refrigerator, freezer, washing machine, clothes dryer).

Tells that houses are heated and lighted by coal, gas, oil and electricity.

Correctly uses and matches the printed word with the following parts of a house: wall, floor, door, ceiling, window, house, home, table, chair, room, bedroom, kitchen, living room, bathroom, porch, garage, stairs, steps, attic, basement.

Behavior Modification

The Durham EDUCATION IMPROVEMENT PROGRAM (EIP), a cooperative undertaking involving Duke University, North Carolina College, the public school system of Durham and the local anti-poverty agency, is, while aimed at improving the intellectual performance of disadvantaged children, also aimed at improving "their social skills and their ability to cope with adult authorities." Carefully-designed "classroom socialization procedures" are used to promote "responsible, cooperative independence."

The child "is expected to be able to learn two sets of adaptive responses—those appropriate at home and those suitable to school. The reward system of the EIP classes favors self-control and the achievement of social academic skills. In contrast to a home in which other responses are rewarded, the EIP child is rewarded for listening, thinking, generalizing, cooperating, and controlling his physical behavior." Children are not punished or criticized unless their actions are likely to lead to injury or destroy property. Instead, "since most of the disturbing behavior in the classroom results from the child's use of peer-oriented attention-getting techniques, the control methods of EIP teachers will focus on rewards for *ignoring* the negative attention-getting behavior." Initially, the reward is food—M&M chocolates—from which the child is eventually weaned "by maximizing the opportunities of the children to learn academic skills."

The EIP programs range from the evaluation of infants through classes in an ungraded primary school. From age two through the ungraded

primary classes, prime emphasis is given to language development. In the ungraded primary school, where some youngsters are not reading at all and others are at the fifth-grade level, the phonetic "Words in Color" method (developed by Dr. Caleb Gattegno of Schools for the Future in New York) and Sullivan Programmed Reading materials are used. To teach mathematical concepts, Cuissenaire rods are used as well as Suppes Sets and Numbers materials, a modern math program. The teachers, a team of two or three with an aide, stress the inductive approach to learning.

While children build a play house in the classroom, for instance, they are encouraged to ask questions about their homes, their families, their community. For four and five year olds, the pre-school classes focus mainly on "increasing emotional stability, control, and appropriate channeling of energy. Basic reading and number readiness skills are also developed."

In explaining the reward technique, Mrs. Joan First of the Durham project gave the following example. "Let's imagine, for example, that six children are seated about the table holding the Cuissenaire rods. Five are constructively engaged. The sixth is kicking the table hard from underneath—making the rods hop erratically about. At this point the teacher has two choices—she can restrain or punish the disruptive child or she can produce a handful of crispy critters—that awful cereal children love—or M&M candies and quickly pop one into the mouths of the five cooperative children saying, 'Thank you for keeping your feet on the floor.'

"The teachers seek to gradually withdraw external reinforcers and permit each child to discover his own sense of control and competency," through achievement in reading and mathematics. In addition, he receives social reinforcement—praise—informally from his family and classmates. "By such a pattern of selective reinforcement EIP teachers encourage the development of internal standards. . . .

"Since EIP teachers are expected to identify several varieties of child behavior and attend or withhold their attention according to a pre-arranged treatment schedule, they must be trained to 'read' overt behavior of all children in their classes. Not only must they be able to identify immediately each type of behavior displayed by a child as he copes with the school setting, but they must be ready to apply reinforcers appropriately to counter peer attention and other competing social forces." A detailed analysis of classroom behavior, called CASES, has been developed.

THE UNIVERSITY of North Carolina's FRANK PORTER GRAHAM INSTITUTE ON EARLY CHILDHOOD EDUCATION, in collaboration with the Chapel Hill school board, is testing the theory that the child who

achieves well is the child who is highly motivated to achieve, and who has had, from early infancy, parents who were somewhat pushy and whose standards for their children were high. As a longitudinal study—the ages of the children involved will run from two weeks to twelve years old—the program has planned two basic divisions: 1) a unique, family-centered day care program for the youngest children and infants of working mothers (all sisters and brothers are kept together) and 2), an elementary school.

The day care center provides total care—from eating, sleeping, play, and solitude, to health and medical care. About two-thirds of the children are white, one-third Negro. The staff, drawn from a number of the University's departments, is trained to emulate "somewhat pushy" parents, who expect a reasonably high level of performance and reward achievement. The emphasis, however, is on encouragement and spontaneity. A child does not have to participate, although children have tended to respond both to the encouragement and to the variety of structured learning techniques that have been explored.

The program will try to answer such questions as "What is the ideal day for a two-year-old?" "What are the most important things for him to learn?" "What is the ideal day for the infant?" "What structured programs, if any, should go into an infant's day?" The purpose is to head off the cycle of retardation, poverty, and disease, and to develop understanding of the antecedents of behavior that pertain to learning.

Parental Involvement

The DEMONSTRATION AND RESEARCH CENTER FOR EARLY EDUCATION at George Peabody College for Teachers has undertaken to determine whether *both* the pre-school experience and early intervention with the mother are necessary—or only one or the other. In the 550-unit Negro housing project adjacent to a pre-school demonstration center, Peabody has involved the parents at four levels of intervention. The mothers receiving maximum attention are those with children in the pre-school program who participate (to a limited extent) in classroom activities, and who also work with a home visitor. The mothers are paid for the half day spent every week at the school during a ten-week period, and babysitters are provided to enable the mothers to come to class. The next group are mothers who are visited by the home visitor, although they have no children in the pre-school program. The third group are mothers who do have children in the pre-school, but receive no home visitors. And the last are mothers with neither children in the pre-school nor home visitors, but who, together with their children, are regularly given a series of tests.

The mothers receiving maximum attention are helped to understand the learning sequence underlying the activities presented in the classroom, and to develop simple techniques to use at home to help the child progress. The process of "diffusion," horizontally through the entire housing project, and vertically through the individual family structure (the effect of the preschool child's experience on his sisters and brothers), are of particular interest to the Peabody researchers. In some cases, the motivation of the mother has proved a problem; in other cases, mothers have entered night school since the program began.

In addition, Peabody is attempting to assess the family relationships "that are more directly related to achievement than the gross socio-economic variables. Five such process variables are under investigation: (a) achievement press, (b) parental guidance of child's educational development, (c) language models, (d) opportunity for conceptual and perceptual development, and (e) organization in home management. Using an interview schedule and rating scale, we have collected data on these variables from our eighty families."

Since the mother is considered to have the primary role in language development, her syntax, cognitive style and conceptualization (whether impulsive or reflective), IQ, and method of reinforcing her child's behavior (whether negative and nonverbal or positive) are also carefully taken into account in assessing their effect on the child.

THE NEW PARENT EDUCATION PROJECT, part of University of Florida's Institute for the Development of Human Resources, is investigating the extent to which the development lag of children from disadvantaged homes can "be prevented through very early intervention." Its aim is to train lower-class mothers to provide enrichment experiences for their own babies, and the mothers will be trained by nonprofessionals drawn from the same class.

The mothers are expected to become "partners and participants in the effort rather than just passive recipients," and a handbook of some of the most feasible and desirable activities for the child and mother in the first year has been developed. The tasks selected were only those "simple to carry out with materials already available in the homes or easily constructed"—materials such as toys made from scraps, blocks made from milk cartons, dolls made from worn socks.

The infant stimulation was designed to begin at three months, and the first series of exercises include "only activities in which the baby is lying or held in a sitting position." Later series, such as jiggling keys for attention, playing "pat-a-cake," and the like, are activities for "the propped

sitting, sitting alone, crawling stages." Mothers are advised to call the infant by his name, and to describe with words whenever possible the objects and actions of the exercises. "A few of the exercises consists entirely of a mother-child verbal interaction; many others give some emphasis to verbal stimulation."

The exercises range from simply exploring objects to reaching for a spool suspended on an elastic tape, grasping and pulling it firmly enough to stretch the elastic, knocking over an array of various sized cans, or dumping them out of a nested position, or pulling on a string to get an out-of-reach toy.

The mother works with her baby on two exercises a week and is "advised to do the exercise at any time she finds the baby in a happy, responsive mood in the course of her regular interaction with it—rather than setting up a particular time for 'teaching' it.

"It has been emphasized that these materials are not a rigid course of study, and are not to be presented as though all infants and all mother-child relationships are alike. It is expected that these materials will bring mother and infant closer together in warmth and play relationships, not teacher-pupil academic relationships."

Although the problems are many—the problems of "very young, uninterested mothers," "distractions to teaching" from ever-present siblings, the "difficulties in re-locating" a constantly moving clientele—"our babies are achieving ahead of the norm expectations—except for the verbal areas. . . . Verbal stimulation may be, indeed, a very critical lack in these . . . homes. We are, at any rate, attempting to increase our efforts in this area."

PARENTS are also involved at the FRANK PORTER GRAHAM INSTITUTE ON EARLY CHILDHOOD EDUCATION of the University of North Carolina. Not only will a number of mothers and fathers be employed in the Center, in jobs ranging from yard work, cooking, and maintenance activities to caretaking, teaching, carpentry, and secretarial work, but the entire Center will be open between the hours of 7:00 a.m. and 10:00 p.m., to allow for after-school and evening activities for both adults and children."

The Center will be available "for adult education and/or discussion groups, for tutorial and study hall activities, or for neighborhood meetings of various sorts. Evening suppers and social events will also be possible parts of Center activities. Scout groups or hobby clubs and various sports can be developed, hopefully with neighborhood leadership. As we are feeling our way, we don't know what programs will develop. The parents will let us know what they want."

THE DURHAM EDUCATION IMPROVEMENT PROGRAM involves parents through supportive services aimed at "strengthening the family's ability to function more effectively in supporting the education of its children." The social work staff is engaged not only in family casework, agency collaboration and consultation, but in group work with parents as well. "Our impression has been that it is important to give reasonable consideration to both home and school rather than over-emphasizing either. Gains made in school will be sustained if reinforced by the home." In group meetings, parents are helped to articulate their feelings or problems regarding their children, to understand the school curriculum, to learn specific skills to use with their children at home, and to become aware of community resources. There is also an effort to stimulate dormant leadership ability among parents.

In addition to group meetings of parents, a newsletter is published, featuring interviews with parents, their art work and poetry, and child art and classroom photos. Written at an eighth-grade reading level, and printed on an offset press, it presently goes to some twenty-four families.

THE PROBLEM of parental involvement is "particularly acute for the disadvantaged," Mr. Jule Sugarman, Associate Director of the Office of Economic Opportunity's Head Start program, told the Athens conference. "A higher proportion of these parents have feelings of alienation and distrust, and a misunderstanding of the educational process. This is not limited to the disadvantaged. We have not thought through how teachers, physicians, key community agents, and parents can work as a team to help the child. We have got to find the way since we do not have enough staff, and since there is nothing so effective as the effective parent." Currently, the OEO has begun a pilot program of Child and Parent Centers, to help disadvantaged parents with infant training.

Community Involvement

The Sumter CHILD STUDY PROJECT (South Carolina) has involved community mental health and welfare agencies in a preventive program to head off possible crises that might be experienced by children unprepared to handle the stress of the early grades or first entering school. A pre-school checkup is administered by a psychologist, who observes and tests the child while his parents are simultaneously interviewed by a social worker. Team members summarize their impressions and later discuss each child's record with a consultant group made up of a regular Project staff member, a local pediatrician, and a child psychiatrist.

Based on the findings of the pre-school checkup, or subsequent data from the early school years, it is decided whether intervention is necessary, and if so, what kind of intervention is appropriate.

"The aim was not necessarily to develop new activities, but to engage the key agents responsible for the child's behavior and development. . .

"A few children with severe psychiatric problems were referred to appropriate private and public treatment facilities. . . . The majority of children could be handled successfully within the structure of the Project. For example, parents of children evaluated as having excessive dependency and immaturity problems were offered family counseling and concrete plans for developing more independence and maturity prior to school entry. . . .

"Community resources such as school programs, medical facilities or welfare agencies were easily identified and used. However, many needs identified in these children and their families could not be met immediately because resources were either unrecognized or non-existent. . . . A group of children, identified as weak in adaptive skills and seriously inexperienced in typical school behaviors were enrolled for six weeks during the summer in the school they would attend in the fall (prior to Operation Head Start). Remarkable results were found by teachers who carried out 'readiness prescriptions' developed by the Project staff. . . .

"The Project took a new look at existing community resources and ways in which they could meet identified needs of children to develop greater social and coping skills. This has led to the creative use of church programs, neighborhood play groups, family outings, pooled efforts by groups of parents, and the development of new city recreation programs especially aimed at the pre-school, disadvantaged child." The needs of a parent returning from a state psychiatric hospital, for example, "were instrumental in the formation of a community council of key agents to work for greater assimilation of parents returning to the community."

Evaluation of the effectiveness of the Project still awaits completion, but already there are "findings of considerable import."

"Mental health teams can be highly efficient in identifying likely problem areas long before they develop into clinical syndromes, and they can prescribe activities and experiences which will develop coping skills to meet predictable life stress periods. Further, the Project personnel and consultants have helped the school as a system to deal "more advantageously with children who have problems." An extra "dividend" has been the collaboration between the school and parents.

"Perhaps the most significant contribution of the Project has been the emphasis on strengthening others to be more effective with children. This

process has been examined at that often ambiguous line between developmental problems well within a teacher's or parent's capabilities to resolve versus those problems which would benefit from referral to psychiatric treatment resources. The goal is total collaboration, rather than indifference or displacement of problems onto 'experts.' "

HEAD START programs, run variously by public schools, private schools, or private non-profit organizations, have involved a variety of community agencies and sometimes an entire community in early childhood education.

An unusual example of the latter is the CHILD DEVELOPMENT GROUP OF MISSISSIPPI (CDGM), which decided to operate a large-scale rural program rather than a demonstration center, and which hoped to show the isolated rural poor that they could change their lives. In Holmes County, one of the ten poorest in the nation, a center "came into life from nothing." There had been no community organization, no previous ideas about early childhood education, no facilities. The people built the center themselves. When CDGM funds were cut off temporarily, the people kept their centers going on a volunteer basis. There are now seventy centers in fourteen counties, where previously there had been no early childhood education, and no cooperation between counties.

Mrs. Mary Emmons told the Athens conference, that for the CDGM staff, "the crucial point" in the U.S. Office of Education's report on *Equality of Educational Opportunity,* "was the sense of powerlessness poverty groups have; the crucial point for the child was how much he felt he could control his own destiny." Thus control of CDGM centers is "in the hands of the poor community to a very large extent," in "partnership with professionals." Each center is operated by a committee, elected by the community, that acts as a school board, hiring the staff and teacher aides. as well as the head teacher, who must be recommended. The principle is to "not deny the culture around you, but use it."

Sponsorship

No single kind of institution or single kind of professional group has a monopoly on providing pre-school programs," Mr. Sugarman told the Athens conference. Thirty-eight per cent of the Head Start grants have gone to public school systems, seven per cent to private and parochial schools, and fifty-five per cent to private non-profit organizations, half of which are community action agencies and the remainder other agencies, such as neighborhood houses or settlement houses. "There is a tremendous range of sponsorship," Mr. Sugarman said. "I can't say that the school

system is better or worse than the private or nonprofit sponsored programs. It depends totally on the interest, motivation, intelligence and innovation of those running the program.

"But in a pre-school program that may involve eight to ten mililon children, we have to use every resource in the country we can find. No single institution can do it alone. Neither educators, welfare workers, social workers, or physicians can do it alone."

For instance, the OEO's new Child and Parent Center program, now in the pilot stage, will involve the Children's Bureau, the Welfare Department's medical and health teams, and the Department of Housing and Urban Development will be providing money to construct the new facilities.

Head Start has already stimulated the use of local and state funds to provide kindergartens, Mr. Sugarman said. "It happened in Virginia this year, and in West Virginia in seven or eight counties. But I would like to give just two statistics that will show the dimensions of the enterprise. If we were to expand early childhood education as much as a number of educational groups have recommended, we would be adding $6 billion a year in federal, state, and local funds—and creating a demand for one-and-a-half million people to work in those programs."

"Last year we estimated we needed some $2 billion for children three years of age and above who we thought needed Head Start. But we can't come anywhere near even that level of funding in the near future.

"The broader philosophic question, however," Mr. Sugarman continued, "is whether it is wise to invest $2 billion, or $6 billion, or $10 billion in programs with young children. I wish I could say the programs have given us a definitive answer. But it is too early yet, and the lack of concern far too great, to see where we are going.

"Certain tests, of course, have shown that children are better off after Head Start or Title I programs. But is the effect lasting? Are we getting our money's worth? This is a serious question. If we simply follow the pattern of elementary grades, as far too many kindergartens do, we won't. If we can't find a more effective way, we shouldn't put our money in it. Yet we have considerable knowledge on how to modify and change education to provide results. Indeed, we have more knowledge than we use.

"I hope you take the business of planning very, very seriously," he told the educators at the Athens conference. "I hope you do not simply repeat what has already been done, or assume that what is good for another state is good for yours. Children need programs designed specifically for their needs, and teachers to teach individualized programs for specific children.

"We need to go at planning in different ways. It can't be done in an

ivory tower. The process must take in a lot of different individuals, from state departments of education, universities, welfare departments, school boards, program administrators, teachers, social workers, physicians, pediatricians, parents, and members of the community at large. The judgments of each must be listened to with attention, and really respected. It's a hard process. It takes time, patience, and sheer energy—but it builds community support and understanding."

DR. NIEMEYER of Bank Street also stressed the necessity of comprehensive planning, warning of the danger that state-wide kindergarten programs might be established in the South merely by the stroke of the legislative pen. The purpose of the Southern Education Foundation, in starting the dialogue on early childhood education, Dr. Niemeyer said, "is to help those concerned with early childhood education in the South to see to it that kindergartens are instituted at a more advanced quality level than they would be if they were set up by legislative fiat on a certain date."

"It isn't easy for those of us who have spent our lives working in education to take advice from the outside," Dr. Niemeyer continued. "But it must be remembered that the recommendations leading to the comprehensive sweep of Head Start did not come from educators, but from outside the educational establishment, from pediatricians, psychologists, and so on."

"Head Start," he said, "has proven the value of the comprehensive approach. Starting with the needs—the educational, medical, dental, psychiatric, and family-support needs of the most disadvantaged children—and utilizing the entire range of the professional community to meet all these needs, is the avenue that promises most in quality."

Teacher and Paraprofessional Training

"It is a critical problem where staff is to come from," Mr. Sugarman said, referring to the two and a half million that will be needed in the next ten years. "It will be an overall disaster if we do not get the number, kind, and quality we need. At the apex, our graduate programs must provide the leadership for the total training effort. We must increase not only the number who can afford doctorates, but the number of our training facilities in all fields, in social work, child development, home economics. Of equal importance, we must face the problem of developing non-professionals, both in terms of their orientation and their future careers. It is a most difficult process to take a person without formal education and make him productive in the classroom. This is a particularly acute challenge in the South.

"Another problem is certification. Virginia, for example, has decided that a person with an elementary certificate and six hours credit in early childhood training can become a certified kindergarten teacher, a temporary step. But Arkansas has a constitutional prohibition against using public funds for educating children under six years old. Those responsible for training early childhood education teachers have got to find ways to expedite the process. Unless we find ways to infuse the knowledge about early childhood education, it is not going to be a well-done job."

PEABODY COLLEGE has a variety of programs for pre-school teachers and teachers' aides. "Our short-term training varies from half a day orientation meetings to institutes that last eight weeks," stated Dr. Hinze, Director of Training at Peabody's DEMONSTRATION AND RESEARCH CENTER FOR EARLY EDUCATION (DARCEE). "We have Head Start orientation programs conducted on the Peabody campus and in other areas. For example, in 1966, the DARCEE training sessions in Atlanta, Georgia, were attended by 266 teachers, program directors, and teaching aides. In Mississippi presently we have continuing in-service training for 200 teachers and aides. In the summer of 1966, there was an intensive six-weeks' instruction for pre-school teachers of deprived children. . . .

"Our aim in these institutes is to train personnel who can themselves assist in the training of non-professionals in the field." There is also long-term career training, but as Dr. Hinze said at the Athens conference, Peabody's training program will "nowhere fill the gap between supply and need."

A NATIONAL TEACHER CORPS project, under the joint auspices of the University of Georgia and the Atlanta Public Schools, does not, of course, promise to fill the gap either. But the pilot pre-kindergarten program is "acting as a catalyst" for the Atlanta schools. Since the development of communication and language skills is said to be "the greatest single problem at all levels in Atlanta education," it is of obvious importance that pre-school teachers in the National Teachers Corps are learning to identify both the learning style of a particular youngster and the strategic time to move him from concrete symbols through the semi-concrete to the abstract.

"One of the finest things of the program are the young people truly interested and dedicated to working with young children." Few interns have dropped out of the program, and the number of young men entering the field has been heartening. "The interns are encouraged to be creative. They, in turn, encourage the youngsters to be creative. They think of

themselves, not as providers of information, but as facilitators of learning. Experienced teachers are finding their excitement contagious."

The University of Georgia also helped train the master teachers for its pre-school project in Clayton County. Five with solid backgrounds in child growth and development attended a six-week summer training program at the University to prepare them for their new assignment. The Center's non-professional teachers' aides, "selected on the basis of their interest in the project and their ability to work with young children," did not attend the summer session. They assist primarily in non-instructional activities, keeping attendance, distributing refreshment, removing wraps.

THE CHILD DEVELOPMENT GROUP IN MISSISSIPPI (CDGM) has made a 16mm movie, *Chance for a Change,** designed as a training film for its teachers. It gives the story of how one center was developed from nothing. "You'll see good teaching and bad teaching," Mrs. Emmons said. "We tried to show what it is really like." The scenes are meant to provoke discussion and learning.

"We were willing to start where we were, with what we had, but we are concerned with lifting the level of the teachers." One teacher's diction, for instance, can be seen to improve notably as the film progresses. The problem was not "to intimidate those who might become good teachers by giving them the feeling it was too difficult for them to do." The teachers are "taught on the same principle as the children," step by step, under a supervisor who has an M.A. in elementary school education. Those who showed outstanding potential became area teacher guides after an intensive three-week session "without jargon or theories, concentrating on the fundamentals, such as how to set up classrooms and the kind of behavior to expect." They return once a week with their problems, for a discussion with their supervisor. "Some attended the Office of Economic Opportunity's Head Start training, but found it too booky, too formal, and lacking enough real experience, to be very valuable."

Mrs. Emmons noted new problems that have developed with the spread of the CDGM centers. "Our staff is too thinly spread," she said, for example. But "now we have a core group with quite extensive training," and this presents another problem. "We have some fine pre-school teachers without college degrees or education. Some are ready to go further. What kind of course could be offered them so they can work in the mainstream of American education? As states develop certification requirements for preschool teachers, will they include such experience in some kind of equivalency rating with a college education?"

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*It can be rented, for $10, from Contemporary Films, Inc., 267 W. 25th Street, New York, New York.

THE UNIVERSITY of Florida's PARENT EDUCATION PROJECT is training lower-class nonprofessionals to educate lower-class mothers in providing enrichment experiences for their babies. "There are two primary reasons for utilizing a non-professional in the role of parent educator. First, there is a lack of sufficient numbers of professionals to implement this kind of education on the scale seen as necessary. Further, there are indications the language, class and caste barriers make it difficult for professionals to carry out a program of individual instruction of the mother in this kind of home. It is for these reasons that we are depending upon women drawn from essentially the same circumstances as the mothers to be the mother educators."

The five-week intensive training of fifteen women began in September, 1966. The criteria for their selection included high school graduation, unemployment, or low-level employment, and some experience with infants. Applicants were solicited through church groups, Head Start centers, school officials, and the Florida State Employment Service. "The entire training was based on the concept that the parent educator's opinions, ideas, and attitudes were highly important and valuable to the success of the program." During the development of a handbook on activities that could be taught the child and mother, the materials were examined first by the trainees to get their suggestions for modification or improvement "before efforts were made to insure that they were learned. . . . The group of trainees were valued participants in many of the decision-making processes—from the beginning of their training."

THE USE OF non-professionals to administer tests has been initiated by the Durham EDUCATION IMPROVEMENT PROGRAM. Some twenty-five wives and mothers have been recruited in a "Middle Manpower Program." "We chose the name Educational Technicians so as not to develop an inaccurate stereotype or trample on any professional toes." It was assumed that basically bright and highly motivated people "would be able to pick up sufficient psychometric and educational measurement skills" to be useful in developing grouping programs for the gifted or retarded, in view of the lack of psychological testing personnel. The Educational Technicians are hired on an "on-call" basis, with the commitment they will work a certain amount of time each week or month. "They constitute a stable, well-trained group that can be tapped for routine evaluation procedures."

Implications for the South

AS CAN BE seen, there are a multiplicity of programs currently going on in the South. Most are aimed at improving the chances of the disadvantaged child for success in school. Most have two major goals— the language development and social development of the child. The learning theories and practices involved, however, frequently receive different emphasis and sometimes appear almost contradictory.

"The very early years of childhood constitute the optimum time for intervention," Dr. Halbert B. Robinson, one of the Athens conference planners and Director of the Frank Porter Graham Institute on Early Childhood Education, said. But, he continued, "this conclusion helps us not at all in the determination of the specific kinds of intervention; it is difficult to know just what patterns one should encourage."

Nonetheless "several tentative conclusions may be offered. First, relatively large gains in scores on a variety of intelligence tests are almost always obtained during the first year. Second, the spurt in development of intellectual functions which characterizes the first year is not *always* maintained in the second year. Third, the control groups tend to gain in IQ points once exposed to stimulating school experiences so that differences between the experimental and control subjects are further reduced after the first few years of public school experience."

The advantages of pre-school education, then, cannot be taken for granted. It will depend both on the quality of the various pre-school programs set up and on how much attention is given to a follow-through in the early grades to see that the gains are not lost.

Knowns and Unknowns

Although many issues concerning cognitive development and learning theory have not been resolved, and some may never be, there are "a number of common aspects to early childhood education," Mrs. Elizabeth Gilkeson of Bank Street College told the Athens conference, "that the South can move toward." One, of course, is recognition of the important fact that learning style and motivation develop in the earliest years.

Approaches may differ, but they share in common an attitude of experiment and research, an attitude, which if more widely developed, can lead to the needed increase in programs designed to understand the cognitive process.

Again, it may not be known whether it is more realistic, economically and politically, to start with three-year-olds or to begin with five-year-olds and reshuffle the first two grades. But it is known that commitment to improving radically the quality of early childhood education can be of enormous benefit, economically and socially, to the South.

THE SOUTH has a higher proportion of functional illiterates compared to the rest of the nation. Yet it is the quantity, and particularly the quality of the South's labor force, Dr. Vivian Henderson of Clark College told the conference, that will "determine the competitive position of the region" in the decades ahead.

As it is, the South mainly attracts only slow-growth industry that does not require highly-skilled manpower. Thus its industrial labor force is growing at a much slower rate than the rest of the nation. Its per capita income also lags behind the rest of the nation. In fact, since the Second World War its momentum in closing the per capita gap has slipped. "We need to develop more skilled workers and attract more diversified industry if we are to improve our competitive position," Dr. Henderson said. "With an increased investment in education, we can bring the South up to the national level in three to four decades. But it will take a determined effort in education."

The importance of early childhood education to the economic viability of the South, then, is obvious. An educational system that fails at the start to develop the learning ability of many of its pupils will find it increasingly difficult to produce highly skilled talent among them later on.

What's at Stake

The implications, socially, of early childhood education on the South are equally profound. To make a breakthrough in the problem of educating the disadvantaged child, and thus a breakthrough in the cognitive and social

development of all children, the South must, of necessity, focus on the Negro child. Negro children, on the average, fall more and more behind whites as they progress through school in the nation's metropolitan areas, but the progressive lag is most pronounced in the South. Here the need is greater, and the emphases on the Negro child all the more important. In addition, the South will have to turn to its potential Negro talent, teachers and children, if it is to develop the kind of industrial labor market it needs.

It is doubly fortunate then that pre-school education, starting fresh, has no previous pattern of school segregation to contend with. One of the most significant findings in the U.S. Office of Education's Report on *Equality of Educational Opportunity,* Dr. John Codwell, associate director of the regional EIP, told the Athens conference, was that a student's achievement in school was strongly related to the educational backgrounds and aspirations of the other pupils in his class. Facilities and curriculum played a lesser role than supposed, and the quality of teaching, while more important, was not of universal importance. It did not affect middle-class students, for instance, so much as the disadvantaged. For lower-class Negro children to be in a school with mainly lower-class Negro children, isolated from the mainstream of America, is in itself a deterrent to raising their aspirations and scholastic achievement. The gains in early childhood education that could be achieved by concentrating on the South's disadvantaged Negro child, in an integrated setting, could go a long way to wiping out the present educational disparities.

HOW SHOULD the South begin? Before the Athens conference ended, many of the participants had begun planning state meetings for their own areas. Although many of the issues raised at the conference remain to be resolved, there was a consensus in outlining the tasks ahead. "A central responsibility for providing educational leadership and professional stimulation" belongs to the state departments of education, Herman B. Smith, Jr., of the Southern Education Foundation said. "Each state department needs to identify and solidify its commitment to the goal of a defensible program of early childhood education and to strike out in pursuit of that goal. This is not necessarily an easy task. Much more information, substantial additional funds, and additional professional personnel not now in sight will be needed."

The need for a comprehensive community-wide approach was emphasized. Not only state departments of education but a variety of university disciplines, social workers, legislators, medical personnel, psychologists, PTA officials, home economists, and health and welfare agencies should,

from the beginning, be included in planning. New and more effective ways of involving the family will have to be explored, and the thorny problems of certification requirements for early childhood teachers and specialized programs for non-professional aides carefully analyzed. None of these tasks are easy. Educators will have to make alliances with groups they may have largely ignored before. At the same time, those who traditionally attack the educational establishment may gain some understanding of its problems.

EDUCATION has always been more of an art than a science. In America it is a continuing experiment. The developments in pre-school education and the changes in the elementary grades that are occurring, however, hold more than the bright promise of revitalizing education through all the grades. The comprehensive approach called for may broaden the very goals of education. What it will mean to those of the future generation of American children who might otherwise be lost in the post-industrial age only the extent of the present commitment will tell.

Appendix

Projects Presented at Athens Conference

Additional information about the programs mentioned in the report may be obtained by writing to the directors.

Frank Porter Graham Child Development Center

A research and demonstration program to cover the first twelve years of life, beginning with "family unit" day-care facilities for infants through elementary school.

Dr. Halbert B. Robinson
Frank Porter Graham Child Development Center
University of North Carolina
West Cameron Ave
Chapel Hill, North Carolina

Demonstration and Research Center for Early Education (DARCEE)

Three demonstration units for children under six to develop materials, curriculum, and training of teachers.

Dr. Susan W. Gray, Director
Georgia Peabody College for Teachers
Nashville, Tennessee

The Clayton County-University of Georgia Instruction Demonstration Center

A study to determine the effect of continuous structured educational stimulus of children three to twelve, involving small groups and individualized teaching.

Dr. Charles E. Johnson, Associate Director
Research and Development Center in Educational Stimulation
Baldwin Hall, University of Georgia
Athens, Georgia 30601

Durham Educational Improvement Program

A cooperative demonstration and research program of the Durham public school system, the local anti-poverty agency, Duke University, and North Carolina College, involving children from birth through nine years, from an infant evaluation project through ungraded primary school.

Robert L. Spaulding, Director
The Educational Improvement Program
2010 Campus Drive
Durham, North Carolina

Sumter, South Carolina, Pre-Primary Project

A project to provide directed-teaching experience and to develop effective involvement of parents, staff, and community agencies, for children three to five.

M. R. Newton, Director
Pre-Primary Schools
Sumter School District Seventeen
Drawer 1180
Sumter, South Carolina

Learning to Learn School, Inc.

A program to innovate materials for a newly-developed sequential curriculum for kindergarten-age children, with emphasis on intellectual stimulation.

Dr. Herbert A. Sprigle, Director
Learning to Learn School, Inc.
1936 San Marco Blvd.
Jacksonville, Florida 32207

Parent Education Project

A program to train lower-class mothers to provide enrichment experiences for their babies, using non-professionals for the purpose.

Dr. Ira Gordon
Parent Education Project
Institute for Development of Human Resources
University of Florida
Gainesville, Florida

Early Childhood Teacher Training Center

A joint project of the University of Georgia and the Atlanta public school system to train members of the National Teacher Corps in early childhood education.

Dr. Rhoda S. Newman
National Teacher Corps Director
University of Georgia
Athens. Georgia

Head Start or Poverty Programs Represented

Child Development Group of Mississippi

Mrs. Mary Emmons
203 W. Capital Street
Jackson, Mississippi

Head Start, Baton Rouge, Louisiana

Miss Nancy Wilson
2650 Nicholson
Apt 2174
Baton Rouge, Louisiana

Head Start Programs, Albany, Georgia

Mrs. Carol King
830 Lincoln Ave.
Albany, Georgia

Economic Opportunity Organizations, Gainesville, Georgia

Mrs. Vera Neidenbach, Executive Director
P. O. Box 458
Gainesville, Georgia 30501

Registration List

Regional Conference on Early Childhood Education
March 27-29, 1967

Conference Directors:

Dr. Milly Cowles, College of Education
University of Georgia

Mr. Ted L. Hammock, Institute of Higher Education
University of Georgia

Conference Coordinator:

Mr. George S. Brooks
Georgia Center For Continuing Education

Conference Planning Committee:

Mr. Robert L. Cousins, Southern Education Foundation
Dr. Milly Cowles, University of Georgia
Dr. Cornelia Eldridge, University of Georgia
Dr. Frankie G. Ellis, Tuskegee Institute
Mrs. Mary Emmons, Child Development Group of Mississippi
Mrs. Virginia Frank, Southern Education Foundation
Mrs. Elizabeth Gilkeson, Bank Street College of Education
Dr. John A. Griffin, Southern Education Foundation
Dr. Gordon Klopf, Bank Street College of Education
Dr. Harry Hall, Southeastern Education Laboratory
Mr. Ted Hammock, University of Georgia
Dr. Richard H. Hinze, George Peabody College for Teachers
Mr. J. Ronald Lally, University of Florida
Dr. Rhoda Newman, University of Georgia
Dr. Halbert Robinson, University of North Carolina
Mrs. Lorraine Smithberg, Bank Street College of Education
Dr. Rachel Sutton, University of Georgia
Dean Joseph A. Williams, University of Georgia

Speakers and Panelists:

Minnie Berson, Division of State Agency Cooperation, Bureau of Elementary and Secondary Education, U. S. Office of Education, Washington, D.C. 20202

John Codwell, Educational Improvement Project, Southern Association of Colleges and Schools, 795 Peachtree Street, N.E., Atlanta, Georgia 30308

Robert L. Cousins, Southern Education Foundation, 811 Cypress Street, N.E., Atlanta, Georgia 30308

Cornelia Eldridge, University of Georgia, 4614 Roswell Road, N.W., Atlanta, Georgia

Frankie G. Ellis, Tuskegee Institute, Tuskegee, Alabama

Mary Emmons, Child Development Group of Mississippi, 203 West Capital Street, Jackson, Mississippi 39207

Joan First, Educational Improvement Project, Durham, North Carolina 27706

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Bibliography of Early Childhood Studies

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ADAMS, ARLIN M., and CHARLES H. BOEHM, *Proposal to the Ford Foundation for a Pre-School and Primary Education Project*. Submitted for the Council on Human Services of the Commonwealth of Pennsylvania. Harrisburg: Department of Public Instruction, May 1963.

ALMY, MILLIE, *Children's Thinking*. New York: Teachers College Press, 1966.

ALMY, MILLIE, "New Views on Intellectual Development in Early Childhood Education." In *Intellectual Development: Another Look*. Washington: Association for Supervision and Curriculum Development, 1964.

ANASTASI, ANNE, and RITA D'ANGELO, "A Comparison of Negro and White Pre-School Children in Language Development and Goodenough Draw-a-Man I.Q.," *Journal of Genetic Psychology*, 81:147–165, 1952.

ANDERSON, H. H., "Domination and Social Integration in the Behavior of Kindergarten Children and Teachers," *Genetic Psychology Monographs*, 21:285–385, No. 3, 1939.

Baltimore City Public Schools Early School Admission Project, *Promising Practices from the Projects for the Culturally Deprived*. Chicago: Research Council of the Great Cities School Improvement Program, April 1964.

BEILIN, H., and L. GOTKIN, "Psychological Issues in the Development of Mathematics Curricula for Socially Disadvantaged Children." Paper presented to the Invitational Conference on Mathematics Education, Chicago, April 1964.

BEREITER, CARL and SIEGFRIED ENGLEMANN, *Teaching Disadvantaged Children in the Preschool*. New Jersey: Prentice Hall, 1966.

BERNSTEIN, BASIL, "Language and Social Class," *British Journal of Sociology*, 11:271–276, 1960.

———— "Social Class and Linguistic Development: A Theory of Social Learning." In A. H. Halsey, Jean Floud, and C. Arnold Anderson (eds.), *Education, Economy, and Society*. New York: The Free Press of Glencoe, 1961, pp. 288–314.

BING, E., "Effect of Child-Rearing Practices on Development of Differential Cognitive Abilities," *Child Development*, 34:631–648, 1963.

BLOOM, BENJAMIN S., ALLISON DAVIS, and ROBERT HESS, *Compensatory Education for Cultural Deprivation*. New York: Holt, 1965.

BLOOM, BENJAMIN S., *Stability and Change in Human Characteristics*. New York: Wiley, 1964.

BRODBECK, A. J., and O. C. IRWIN, "The Speech Behavior of Infants without Families," *Child Development*, 17:145–156, 1946.

BRONFENBRENNER, U., "Socialization and Social Class through Time and Space." In E. E. Maccoby, T. M. Newcomb, and E. L. Hartley (eds.), *Readings in Social Psychology*. New York: Holt, 1958, pp. 400–425.

BROWN, F., "An Experimental and Critical Study of the Intelligence of Negro and White Kindergarten Children," *Journal of Genetic Psychology*, 65:161–175, 1944.

BRUNER, J. S., "The Cognitive Consequences of Early Sensory Deprivation." In P. Solomon (ed.), *Sensory Deprivation*. Cambridge: Harvard University Press, 1961, pp. 195–207.

———— "The Course of Cognitive Growth," *American Psychologist*, 19:1–15, 1964.

CHILMAN, CATHERINE S., "Child-Rearing and Family Relationship Patterns of the Very Poor," *Welfare in Review*, 3:9–19, January 1965.

CLARK, K. B., and M. K. CLARK, "The Development of Consciousness of Self and the Emergence of Racial Identification in Negro Pre-School Children," *Journal of Social Psychology*, 10:591–599, 1939.

———— "Skin Color as a Factor in Racial Identification of Negro Pre-School Children," *Journal of Social Psychology*, 11:159, 1940.

COWLES, MILLY (editor), *Perspectives in the Education of Disadvantaged Children*. Cleveland: World Publishing Co., 1967.

DENNIS, W., "Causes of Retardation among Institutional Children in Iran," *Journal of Genetic Psychology*, 96:47–59, 1960.

DEUTSCH, CYNTHIA, "Auditory Discrimination and Learning: Social Factors," *Merrill-Palmer Quarterly of Behavior and Development*, 10:265–276, July 1964.

DEUTSCH, MARTIN, "Nursery Education: The Influence of Social Programming on Early Development," *Journal of Nursery Education*, 19 (3), 1963.

———— "Facilitating Development in the Pre-School Child: Social and Psychological Perspectives," *Merrill-Palmer Quarterly of Behavior and Development*, 10:249–263, July 1964. [Appearing in the present book in slightly revised form.]

———— and ALFRED FREEDMAN, *A Program to Demonstrate the Effectiveness of a "Therapeutic Curriculum" for the Socially Deprived Pre-School Child*. New York: Institute for Developmental Studies, January 1962.

DUNNINGTON, M. J., "Behavioral Differences of Sociometric Status Groups in a Nursery School," *Child Development*, 28:103–111, 1957.

ELKIND, D., "The Development of Quantitative Thinking: A Systematic Replication of Piaget's Studies," *Journal of Genetic Psychology*, 98:37–46, 1961.

FELDMANN, SHIRLEY, "A Pre-School Enrichment Program for Disadvantaged Children," *The New Era*, 45:79–82, 1964. [Appearing in the present book in slightly revised form.]

FOWLER, W., "Cognitive Learning in Infancy and Early Childhood," *Psychological Bulletin*, 59:116–152, 1962.

GRAY, SUSAN W. and RUPERT A. KLAUS, *Before First Grade*. New York: Teachers College Press, 1966.

HECHINGER, FRED M., *Pre-School Education Today*. New York: Doubleday, 1966.

HESS, R., and V. SHYMIAN, "The Cognitive Environment of Preschool Children." Paper presented to the Research Conference on the Education of the Culturally Deprived, University of Chicago, June 1964.

HILGARD, J., "Learning and Maturation in Pre-School Children," *Journal of Genetic Psychology*, 41:36–56, 1932.

HOFFMAN, M. L., and LOIS HOFFMAN, *Review of Child Development Research*, Vol. 1. New York: Russell Sage Foundation, 1964.

HUNT, J. MCVICKER, "Experience and the Development of Motivation: Some Reinterpretations," *Child Development*, 31:489–504, 1960.

HUNT, J. MCVICKER, *Intelligence and Experience*. New York: Ronald Press; 1961.

———— "The Psychological Basis for Using Pre-School Enrichment as an Antidote for Cultural Deprivation," *Merrill-Palmer Quarterly of Behavior and Development*, 10:209–248, July 1964. [Appearing in the present book in slightly revised form.]

JENSEN, A. R., "Learning in the Pre-School Years," *Journal of Nursery Education*, 18 (2):133–138, 1963.

JOHN, VERA P., "The Intellectual Development of Slum Children: Some Preliminary Findings," *American Journal of Orthopsychiatry*, 33:813–822, 1963.

JOHN, VERA P., and LEO S. GOLDSTEIN, "The Social Context of Language Acquisition," *Merrill-Palmer Quarterly of Behavior and Development*, 10:266–275, July 1964.

JOHNSON, NANCY, "Psychological Report Covering Seven Pre-School Centers." New Haven, Connecticut: New Haven Public Schools, June 3, 1964. (Typed manuscript.)

KELLER, SUZANNE, "The Social World of the Urban Slum Child: Some Early Findings," *American Journal of Orthopsychiatry*, 33:813–822, October 1963.

KENDLER, H., and T. KENDLER, "Inferential Behavior in Pre-School Children," *Journal of Experimental Psychology*, 51:311–314, 1956.

KNOBLOCH, HILDA, and B. PASAMANICK, "Environmental Factors Affecting Human Development before and after Birth," *Pediatrics*, 26:210–218, 1960.

KOCH, M. B., and D. R. MEYER, "A Relationship of Mental Age to Learning-Set Formation in the Pre-School Child," *Journal of Comparative Physiological Psychology*, 52:387–389, 1959.

LARSON, R., and J. L. OLSON, "Method of Identifying Culturally Deprived Kindergarten Children," *Exceptional Children*, 30:130–134, November 1963.

LURIA, A. R., and S. Y. YUDOVITCH, *Speech and the Development of Mental Processes in Children*. London: Staples Press, 1961.

MCCARTHY, DOROTHEA, *Language Development of the Pre-School Child*. Minneapolis: Institute of Child Welfare Monographs, No. 4, 1930.

MILNER, E., "A Study of the Relationship between Reading Readiness in Grade One School Children and Patterns of Parent-Child Interaction," *Child Development*, 22:95–112, 1951.

MONTAGUE, D. O., "Arithmetic Concepts of Kindergarten Children in Contrasting Socio-Economic Areas," *Elementary School Journal*, 64:393–397, 1964.

MONTESSORI, MARIA, *Spontaneous Activity in Education: The Advanced Montessori Method*. Cambridge, Massachusetts: Bentley, 1964.

MOSKOWITZ, SUE, "Reading in the Kindergarten," *Pathways in Child Guidance*, 7:1–4, March 1965.

NIMNICHT, GLENN P., *The New Nursery School*. Greeley: Colorado State College, n.d.

PIAGET, JEAN, *The Origins of Intelligence in Children*. New York: International Universities Press, 1952.

"Pre-Kindergarten: Plenty amid Poverty," *Education U.S.A.*, October 29, 1964.

RAMBUSCH, NANCY M., *Learning How to Learn: An American Approach to Montessori*. Baltimore: Helicon Press, 1962.

ROBISON, HELEN and BERNARD SPODEK, *New Directions in the Kindergarten*. New York: Teachers College Press, 1965.

SCOTT, J. P., "Critical Periods in Behavioral Development," *Science*, 138:949–955, 1962.

SHEPARD, W. O., "Learning Set in Pre-School Children," *Journal of Comparative Physiological Psychology*, 50:15–17, 1957.

SHIRLEY, M. M., "The First Two Years: A Study of Twenty-five Babies," *Intellectual Development*, Vol. 2. Institute of Child Welfare Monographs Series, No. 7, 1933.

SKEELS, HAROLD M., "An Interim Brief on the NIMH-Iowa Follow-up Studies Relative to Mental Retardation, Dependency and Maternal Deprivation," National Institute of Mental Health, Bethesda, Maryland, March 31, 1964. (Mimeograph.)

SMART, MOLLIE S. and RUBIE C. SMART, *Children: Development and Relationships*. New York: Macmillan Co., 1967.

SMILANSKY, S., "Evaluation of Early Education." In UNESCO, *Educational Studies and Documents*, No. 42, 8–17, 1961.

———"Progress Report on a Program to Demonstrate Ways of Using a Year of Kindergarten to Promote Cognitive Abilities, Impart Basic Information and Modify Attitudes which are Essential for Scholastic Success of Culturally Deprived Children in Their First Two Years of School." Paper presented to the Research Conference on the Education of the Culturally Deprived, University of Chicago, June 1964. (Israeli Project, unpublished manuscript.)

THOMAS, ALEXANDER, STELLA CHESS, HERBERT G. BIRCH, MARGARET E. HERTZIG, and SAM KORN, *Behavioral Individuality in Early Childhood*. New York: New York University Press, 1964.

THOMAS, D., "Oral Language, Sentence Structure, and Vocabulary of Kindergarten Children Living in Low Socio-Economic Urban Areas." Ph.D. dissertation, Wayne University, 1963.

TOMLINSON, H., "Differences between Pre-School Negro Children and Their Older Siblings on the Stanford Binet Scales," *Journal of Negro Education*, 13:474–479, 1944.

TRAGER, H. S., and M. R. YARROW, *They Learn What They Live*. New York: Harper, 1952.

WANN, K. D., MIRIAM DORN, and ELIZABETH LIDDLE, *Fostering Intellectual Development in Young Children*. New York: Columbia University, Teachers College Bureau of Publications, 1962.

WELLMAN, BETH L., and B. R. CANDLESS, "Factors Associated with Binet I.Q. Changes of Pre-School Children," *Psychological Monographs*, 60, 2 (whole No. 278), 1946.

WORTIS, H., and A. M. FREEDMAN, "The Influence of Environment upon the Development of Premature Children." Paper read to American Orthopsychiatric Association, Chicago, March 1964.

WRIGHT, J. C., and J. KAGAN (eds.), "Basic Cognitive Processes in Children," *Social Research and Child Development Monographs*, 28, No. 2, 1963.